

POST OPERATIONS SWIFT RETORT: CHALLENGES AND WAY FORWARD FOR A SMALL AIR FORCE

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Abstract

The aerial incidents after 'Pulwama' episode opens an inimitable chapter in the history of air power as it cemented the pivotal status of air force in the overall security milieu. A mission executed by a small air force under modern air combat environment which achieved all its politico-military objectives. However, the incident is the beginning of an unrelenting story as Indian Air Force (IAF) can never erase this discomfiture and will respond in future to regain its lost glory and diminish Pakistan Air Force (PAF) psychological ascendancy. The operation has generated several challenges including psychological and professional for IAF and parity of capabilities for PAF, reminiscence of which will continue for decades to come. In order to remain vigilant and alert, PAF, though a small air force in comparison to IAF, needs to maintain its 'Resolve to Respond' by ensuring its effectiveness against all domains of current complex conflicts. A new approach is adapted by borrowing an academic theory of 'Balance of Resolve' from the strategic brinksmanship, identifying six variables, which covers all aspects of resolve, prudence and inter harmony both at governmental and military levels. The article focuses on the effectiveness of a small air force on the future consequences of the operation in the domain of 'Resolve to Respond' and a future road map for a sustainable resolve to address any similar misadventures.

Keywords: Small Air Force, Powell Doctrine, Stand-off Strike, Balance of Resolve, Weapon Superiority, Combat Effectiveness, Force Integration and Jointness.

Introduction

On 5th October 1914, French pilot Sgt Joseph Frantz and Louis Quenault, his gunner, achieved the first air combat victory by shooting down a German aircraft near Reims, France. Comparably, the shooting down of Indian aircraft by a Pakistani fighter aircraft, under a contemporary air combat environment can be termed as first modern air battle victory with "First Look, First Shot, First Kill" - an air combat only practised in advanced simulators or international exercises.¹ War is a unique enterprise where plans seldom unfold as anticipated. A side having lower numerical strength may turn the table by exploiting superior strategy, effective

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command and control and quality of weapons to its advantage² and the same was proven during Operation Swift Retort³. The 27 February incident opened an inimitable chapter in the history of air power as it underscored the ever prominence of air power and its ability of transmuting tactical actions into strategic effect at all levels.

On 16th February 2019, a 16-year-old Kashmiri youth who was held in captivity by Indian forces and had undergone several sessions of tortures by paramilitary forces, slammed his wagon full of explosives into a bus carrying forty paramilitary persons, killing all of them on the spot. An unknown caller, never corroborated, claimed the responsibility for the attack and showed his affiliation with Jaish-e-Mohammad group. Within hours, India, spearheaded by its media, surmised the whole episode, and ascribed it to a mastermind group, eventually blaming Pakistan for the event. Concurrently, the media and government started a campaign to persuade the authorities to take formidable revenge through surgical strikes, analogously as in 2016. Indian officials claimed that on 29 September 2016 they had conducted a surgical strike across the Line of Control (LOC) against the terrorists' camps in the Azad Jammu Kashmir area.⁴ They further alleged that the number of casualties inflicted had been 'significant' in number. On the contrary, Pakistan denied all the Indian insinuations and was portrayed as fabricated. Pakistan Foreign Office stated the claim as "baseless" and blamed India for escalating the situation on the LOC.⁵ On the other hand, Pakistan Army totally denied the strike and attribute it to only cross border firing without any occurrences of crossing the LOC by Indian soldiers.⁶

Geoffrey Blainey in 'Causes of War' summarises that the optimism of positive war outcome increases the chances of war outbreak.⁷ He also divulged another parallel from the analysis of war since 1700, that all the optimist leaders who are confident of gaining victory through their private or cabinet analysis also assured of gaining victory in quick time. The driving forces and the intuitions which made them to belief supremacy also strongly influenced them that the war would be swift. "The belief in a short war was mainly the overflow from the reservoir of conscious superiority".⁸ This optimism obfuscates misguided strategy which eventually leads to horrified battlefield results. It is believed that leaders actions decide whether the battle will result in a triumph or a resounding loss; as their blunders are paid by nations for decades in the form of humiliation, embarrassment and repentances. On 26 February 2019 at early hours, PM Modi directed IAF to throw six bombs against a false terrorist camp in Balakot, not comprehending that in past stand-off strikes never executed as it would lead to a 'tit for tat cycle' with no limits and no end. An

analysis of the February incident reveals that the Indian gross miscalculations were a result of incorrect beliefs and erroneous assumptions.

Colin Powell Doctrine states that in order to engage in a military action, it is fundamental to have precise goals and the support of the nation.⁹ Furthermore, once such an action is decided, the nation as a whole must apply all available resources to achieve the desired objectives;¹⁰ PAF, on 27th Feb 2019, following the above doctrine, conducted a retaliatory prodigious airstrike with a package of around 25 - 30 aircraft and dropped six standoff weapons on three different targets in Indian occupied Kashmir.¹¹ The package on their return shot down one Mig-21 whose wreckage fell in Pakistan and another SU-30 whose wreckage, remained in Indian occupied Jammu and Kashmir area – revamping the security milieu of South Asia towards new horizons. The show was the manifestation of resolve by a small air force which generated a ruinous response parading its professional training, motivation and coherence of objectives.¹² Pakistan conveyed a strong message to India and the entire world that parity with India will be kept at all levels at any cost, even, 'if we have to eat grass'.¹³ Therefore India must remember, that, not responding shall never be an option; the only deliberations may be time and targeting.

Post Operation Swift Retort has serious implications for both the air forces, imprints of which will continue to resurface for decades to come. PAF, though a small air force in comparison to IAF, needs to adapt a strategy that encompasses an entire spectrum of air operations and its effectiveness in all domains of current complex conflicts. A key component is the 'Resolve to Response' which enables PAF to remain alert, vigilant and ready to bounce back against any malicious intentions by IAF. This article deals with post 'Ops Swift Retort' challenges and the way forward to ensure the effectiveness of air power under the unique environment of south Asia. In the article, a new academic approach is adapted by borrowing an academic theory of 'Balance of Resolve' from the strategic brinksmanship, identifying six variables, which encompasses all aspects of resolve, prudence and inter harmony both at governmental and military levels. The way forward endeavours to pursue and espouse modern methods of air fighting to negate the adversary's advantages in quantity or quality through new operational doctrines while remaining aware of the environment and the emerging novel threats. Thus, this article is an attempt to suggest how a small air force can maintain its effectiveness and 'Resolve to Response' against any future misadventure by IAF.

Psychological Challenges for IAF

The Balakot fiasco is not over; rather it is the beginning of long patient battle of opportunity. It has complications for both air forces; for the IAF, it has to

build the morale of her force particularly the fighter pilots, who believed in truth and their job revolved around integrity and reality. On the contrary, Indian leadership is hiding the truth; whereas the entire IAF knew the facts after the reconstruction of air combat, the delusions of untruth effect will create a mental negation and will have a psychological effect on the future performance of the IAF. Additionally, the psychological ascendancy of PAF is required to be addressed by the commanders as morale boosting and rebuilding of their air force may be the biggest challenge for the new commander of IAF. Another implication of stand-off strike is the 'tit for tat cycle', in which weaker states always gain psychologically, resulting in bringing the opponent down to their own level. Currently, approximately 350 fighter aircraft air force have become compatible and equal to approx. 550 fighter aircraft strong air force¹⁴ and both are compared and credited at equal levels at international forums. IAF needs to revisit how to shade-off this psychological balancing of two forces domestically and internationally.

Professional Competence – A Question Mark on IAF

It is a nuisance for IAF to provide elucidation for bombs missing their targets. It was established within hours that IAF missed all its publicised targets. This was confirmed by location videos, high resolution satellite images of the bomb impact provided by European Space Imaging,¹⁵ analysis by imaginary analysts,¹⁶ and the interviews of the residents. Analysis revealed that IAF went into a deep dilemma with respect to its target engagements. There can be three possibilities of IAF missing its targets; first, the bombs were missed by pilots due to any intentional or unintentional errors - a mission failure as per norms of assessment in any international or local exercise; forcing, IAF to remain silent regarding the success of its mission in air power forums. Second, IAF should accept that due to technical reasons, the bombs missed their targets, as elaborated by ASPI (Australian Strategic Policy Institute) blaming the difference of actual target elevation as sensed by GPS of the bomb and the above mean sea level elevation given on aeronautical charts – meaning failure of mission due to miscalculation or technical error. Third, IAF can accept that it had engaged all targets as given by their government which means that they deliberately dropped them in the forest,¹⁷ thus saving themselves from humiliation. However, this narrative is the antithesis to the government's master plan and media, subsequently, cannot face their nation; thus, it is a strategic limitation. Professional air forces of the world are respected by their actual operations conducted during crises which is the sole yardstick and criteria of evaluation among professionals, not the number of aircraft, equipment and assets they possess. The biggest challenge for the new commander of IAF may be to overcome this psychological barrier among its personnel.

Parity in Technological Race – A Gigantic Challenge for PAF

Stefan Possony insinuated in 'The Strategy of Technology'¹⁸ that economically advanced country normally inducts technologically advanced weapons to create an imbalance in power and numbers to overawe their adversaries, while forcing them to divert their resources on acquiring hi-tech counter weapons, thus stretching their economy. The same is observed after Operation Swift Retort which came as a good omen for IAF, as their pending induction projects were expediently approved, and funding was released for Rafale contract with the speed of light. IAF has already received three Rafale aircraft and the number will increase to 36 by 2022.¹⁹ The Rafale with meteor missile will pose threat to PAF due to its extended firing range. It is easy to predict that now IAF will undergo a massive induction of sophisticated systems, procurement of modern equipment and up-gradation of the entire armed forces. Consequently, the future canvas displays a wide disparity of conventional forces between the two rivals. On the other hand, how Pakistan with struggling economy will maintain the balance would be the biggest challenge for the armed forces and particularly for the PAF. Pakistan must remember as observed by Mearsheimer, that inequalities of power and increase in war potential embolden states to go for war while chances of war minimize as the difference in inequalities reduce.²⁰

Way Forward

Andrew Mack has debated in "Why Big Nations Lose Small Wars," that a state success and failure in asymmetric conflicts entirely depends upon her relative resolve and interests *vis-à-vis* the enemy.²¹ In essence, the state with more resolve wins, irrespective of adversary available resources.²² Albeit, the above statement referred to an asymmetric conflict against a big and resourceful nation, however, it holds good for any asymmetric force ratio conflicts or incidents between the two states as seen during February 2019. Robert Pape in 'Bombing to Win'²³ concludes that these unbalanced conflicts can depend upon the strategic interaction and can easily be predicted by evaluating this consideration. Similarly, Ivan Toft prognoses in 'How the weak win wars'²⁴ states that small forces win against the strong states when they employ superior strategy versus their opponents' incorrect strategy. According to strategists, every strategy can be countered by a superior counterstrategy.²⁵ States which continuously monitor and predict adversary's strategy can surprise them by choosing dramatically improvised and ameliorated counterstrategy. Taking into consideration the above, one can apply the nuclear brinksmanship,²⁶ theory of "Balance of Resolve",²⁷ which propagates that state with the maximum resolve will eventually win the conflict and relate it in current Indo-Pak scenario. Robert Powell in its "Nuclear Deterrence Theory" expounded that during any crises the amount of

‘resolve’ and ‘certainty’ one side possesses against the other decides the outcome. Crises begin when one state is assured that her own resolve is greater than her opponent. An incomplete information about the resolve of her adversary leads to “payoff to winning, its payoff to submitting, or its payoff to disaster”. Therefore, Brinkmanship is the function of state resolve. Lesser the information one has about their rival, lesser are the chances for better Brinkmanship. This may eventually lead you to disaster or more pay-off for the crises.²⁸ In another case, neither state has certainty about the level of her opponent’s resolve; however, both have a clear idea regarding which state is more resolute. In that case, the less resolute state would never like to initiate the crises as it knows that the more resolute state will always escalate the crises and will not hesitate to take any risk. As a result, the less resolute state will never escalate the situation and avoid any brinkmanship crises.²⁹ The second aspect is that a state will take the risk till a certain level before it rolls back depending upon its own resolve and the knowledge about the adversary state’s resolve. The two factors which determine the above include the payoffs and one’s own understanding of resolve. ‘Balance of Resolve’ is an important factor in determining the imbalance in the motivation level of a state; if a weaker state has higher stakes, then it will never hesitate to take greater risks and be ready to pay higher costs than a stronger state with less stakes with respect to its security interests.³⁰ As Christopher Layne highlighted that in these types of situation the weaker states will endeavour and adopt new methods of war fighting to negate the adversary advantages in quantity or quality. Concurrently, weaker states response differently by adapting new features in their operational doctrines and tactics. The new strategy will be formulated to keep abreast with the environment and threat.³¹ Similarly, Edward Luttwak propagated that the essence of strategy always pivoted around the ability to identify and exploit the opponent’s political, operational, and tactical vulnerabilities.³² Likewise, in these types of small conflicts, a state will achieve victory if it achieves the desired objectives or goals whereas a loss is termed if the crisis ends in stalemate or outright defeat. Cuban Missile Crises in 1962 is an example of ‘Balance of Resolve’ between two superpowers. The US was eventually able to thwart the threat of deploying missiles in Cuba due to her firm and absolute resolve against the Soviet’s resolve. Thus “Balance of Resolve” theory can benefit a small State in acquiring its objectives and goals against a big and strong state.

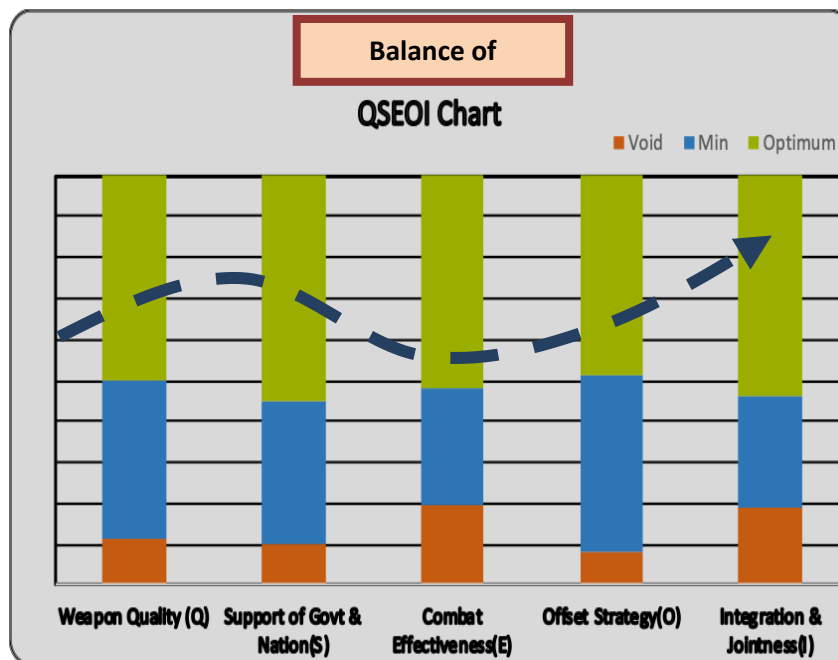
As discussed before, theory of “Balance of Resolve” is a nuclear brinkmanship theory; however, the same theory was applied to February 2019 Indo-Pak crises, and it was observed that all of the feature discussed above were ideally proven and manifested during the crisis. India, since 14th February onwards, was preparing the ground and had simultaneously started to calculate the ‘Balance of Resolve’ of Pakistan. With a quantitatively stronger military power and enjoying a

better diplomatic and political support at international level, India also appeared to have the concurrence (tacit approvals) from United States,³³ and other major players of the world,³⁴ which emboldened her to conduct strikes against Pakistan. India's resolve was also boosted due to abating condition of Pakistan's economy as she assumed the cost of war may not be sustained economically by Pakistan despite strong warning by Prime Minister of Pakistan³⁵ against any misadventure against his country. Another factor they had in mind was that their superior armed forces (as per their calculation) will not allow Pakistan to initiate a war. However, on the contrary, India miscalculated the resolve of Pakistan and Pakistan Air Force who were ideally prepared for riposte and proved their firm and resolute resolve through well prepared operational doctrine, superior tactics, professional training and surprise through their superior weapons. The crisis will be remembered by Pakistan as their victory whereas India shall remember it as lessons to be learnt for the future. The deep analysis of historical baggage and the strategic culture of both the countries, this palpable sense of humiliation may not be easily disregarded by India because they would like to regain their status and pride, as it has severely shocked and affected her efforts towards her regional hegemony and pursuance to become a global player. This is indeed a strong blow to her overall aspirations and has led to a downward spiral in her efforts to become a regional power. Concurrently, both her false claims of hitting the camp and shooting down an F-16 were denied at every international forum that further dampened her international credibility. Therefore, India would like to act and attempt to regain her 'Paradise Lost' which is mandatory for the psychological building of her forces and re-establishing confidence of her nation.

To maintain the "Balance of Resolve" towards one's own favour, a number of variables are identified on which the resolve of a state or force constitute, and the fusion of these variables provides the overall strength of the resolve for a force. These variables will enable the leadership to take prompt decisions and formulate the overall response during the crises. Each variable is divided into three levels namely 'void', 'minimum' and 'optimum.' The 'void' level elucidates the variable ineffectiveness towards supporting the resolve and its significance becomes negligible. The 'minimum' level explains a little support and requires immediate attention to enhance its effectuality or increase other variable productiveness to compensate for this inadequacy. The 'optimum' level is the desired one and must strive to sustain for each variable. These levels are quantified after pitching against the enemy's same variable levels considering, enemy resolve, enemy strengths and weaknesses, armed forces structure and weapons superiority, international and domestic political standing. The calculation requires deep analysis based on true and unbiased information and intelligence of enemy and own true capabilities. The

important aspect is the interconnection and dependency of each variable and its level, and their combination eventually determines the total resolve. Consequently, it is a continuous process and necessitates constant dispassionate evaluations. There cannot be a fixed overall value for the overall optimum resolve; rather it is varied depending upon commander's understanding, perceptions and available data as shown in Figure-1.

Figure-1: Balance of Resolve Chart³⁶



Source: Author's own compilation.

The first variable is the 'Superiority in Weapon Quality' as it was AMRAAM on F-16 in February 2019 which provided the cutting-edge technology during air combat. Firstly, Weapon Superiority is a complete structure not limited to its general capability and quality against the adversary rather it comprises of operator's 'state of mind', professional employment and integration with available assets. The 'state of mind' to employ weapons requires boundless training, grooming and deep understanding of complete air spectrum in all levels of conflicts. It is the 'state of mind' in offensive or defensive frame which ultimately decides the combat outcome. History is full of incidents where forces with better equipment and condition were unable to succeed due to fog of war, combat environment or lack of courage - all contributes to 'state of mind' grooming during combat training. The 'state of mind' also provides clarity from commanders to operate and formulate pellucidity in all

decisions. Secondly, weapon superiority improves decision-making capacity, courage and resolve to employ them in multiple situations. Thirdly, the primary characteristic of superior weapon is its competency to achieve the given goals and objective.³⁷ Fourthly, superior weapons should have the ability to enhance the survival rate in the battlefield - most important factor as it is directly related to the degree of morale and psychological effect. The same have played the vital role during Balakot Fiasco. Nonetheless, the weapon superiority should not be limited to only technological superiority, which is not the panacea for all issues; rather a technological advanced weapon along with operational art will always provide the desired result - as there is no substitute for operational art since the beginning of warfare. In this variable level 'void' is the non-compatibility of weapons in the same environment, example, active BVR against IR missile in air combat. Similarly, 'minimum' can be a low-grade weapon against a high-grade weapon with low training, example is semi active BVR of old generation versus active BVR or blurred about adversary weapons capability. An 'optimum' level means inventory of superior weapons with its all-dimensional training and exposure in complex combat scenarios.

The second variable is the 'Support of Government and Nation' as the resolve of armed forces always emanates from them. Therefore, wars are not winnable just with forces' determination and commitment against any adversary rather they require the government's and nation's support behind the armed forces. The heartening part of February crisis was the unanimous support of government and nation to the armed forces and the response was ideally orchestrated through combined wisdom. To cater for the same variable, surreal shooting of F-16 was dramatized by India,³⁸ to satisfy nation's feelings and provide face saving for its armed forces. The image and respect of forces among the nation is vital; therefore, measures must be taken to build confidence and faith of the nation on the capability of armed forces to respond to any challenge in the desired manner. In this variable, the 'void' level means battle by armed forces without general approval of nation along with minimal government support. The 'minimum' level explains government support without opposition and with negligible nation support, whereas the 'optimum' level is a wholesome support of the parliament and the nation.

The third variable is the 'Combat Effectiveness' - a tool which provides the overall capability of a force to generate the required outcome during a combat against an enemy force.³⁹ 'It is the integration of all available combat equipment and supports to form a single entity for desired combat results against the enemy. Though exact measure of 'Combat Effectiveness' is difficult, but it facilitates in strategic and tactical decision making. With the advancement in technology in air

power, the 'Combat Effectiveness' in air power is different as compared to sister forces' concept of generating strategic effects in few combat sorties. The modern warfare has changed from 'number of sorties to destroy the targets', to 'number of targets engaged per combat sortie'.⁴⁰ Air power has become cliché for its ability of ubiquity to neutralize anything which could be detected and identified. However, the question of correct detection and identification remains of paramount importance – missions fail primarily due to neglecting these two facets. 'Combat Effectiveness' provides enhancement of capabilities, but requires continuous foresightedness, upgradation of doctrine and striving for proactive strategy, as in reactive domain, forces will always be trailing exasperatingly the technological advancement of their adversaries and negating their own initiatives. Furthermore, effectiveness does not restrict itself to respond in the same domain / level rather initiatives, exploring new arenas, out of box concepts and multiple techniques can always be considered to balance adversary actions. Another important ingredient is the esprit de corps (Morale) of the force, which depends upon both internal and external factors and plays a key role in overall development of the forces. As Napoleon's motto "In war, morale to physical forces are as three to one". Similarly, Colonel Foertsch believed that the result of a war depends upon the overall morale of the troops not on weapons, equipment or the operational strategy.⁴¹ Consequently, an efficient air force always keeps its combat effectiveness at the highest level. In this variable 'void' level means ineffective training with negligible number of eye wash exercises without integration of combat elements and with no consideration for morale of the troops. The 'minimum' level means few exercises while exploring limited air spectrum and force multipliers and taking few actions to address the morale side of the troops. An 'optimum' level necessitates regular exercises, vigorous training and applying full spectrum of air combat with integrated Force Multipliers and a continual pursuance of enhancement in proficiency and difficulty level, while ensuring high level of Morale among the troops.

Indubitably, PAF must endeavour to ensure a 'Weapon Superiority' with compatible weapons on board vis a vis the enemy. Nevertheless, it should not be restricted to steel versus steel only. PAF may contemplate 'Offset Strategies'⁴² to strengthen its force structure - a term used to portray competitive strategy to maintain gain over potential rival over protracted period while preserving peace as much as possible and divert the attention of enemy towards an area, advantageous for the implementer. However, due to current economic condition, Pakistan may need to combine strategy of technological induction and 'Offset Strategy' to keep a balance of force. Though a specialized field, requiring a separate study, areas can be explored including artificial intelligence, swarm of UAVs and cyber space. An integration of all these capabilities, though a daunting task, will be able to provide

the future combat effectiveness of the force. Additionally, targeting should not be restricted to a single option, like the Gulf war where the first missile was not fired by F-117 rather by AH-64 helicopter. In this variable 'void' level explains that scarcely any option exists other than reciprocating on enemies' term, whereas the 'minimum' follows the same domain with adjustments of elements of weapons, doctrine or strategy. In the 'optimum' level, strategies like change in response and attracting the enemy towards your desired areas of competition should be included.

The next variable to supplement the resolve is 'Force Integration and Jointness' of thinking, reacting, responding and supporting each other among the three services. This is conceivable by constant communication at each level with an aim to comprehend each other glitches and limitations. Therefore, sister services must be on single page before arriving at any principal decision as action of one may be contested by other or vice versa. This is possible by correct reading of security environment and preparation to counter and respond. In this variable, the 'void' means, action by one service with others remain ignorant. 'Minimum' is the support if required by one service, while in 'optimum' level, single or bi-service application with complete support and readiness of other services is undertaken.

Conclusion

The 'Pulwama' episode opens an inimitable chapter in the history of air power as it pondered the ever prominence of air power and further cemented its status in the overall security milieu. A modern air battle, where a small air force had achieved its mission and goals against a large air force under a modern air combat environment, only perceived and practised in modern simulators or international exercise scenarios. However, this episode should not be taken as an isolated incident rather it should be deliberated under the overall ambit of the on-going war which the country is combating since last decade. In the current global environment, the air power has altered the very landscape of warfare. In the present military era, the strength of "air power" is unparalleled as it has changed the meaning of 'mass' due precision bombings, while influencing the political behaviour of the land. Small air forces including Pakistan need to utilize their knowledge in the development of better approaches of resolve for the future generations. It requires continuous evolvement of modern concepts and the ways of preparation to overcome any fast build up situation, as it experienced in 2019. The discussed resolve to respond approach is borrowed from academic theory "Balance of Resolve" to ensure the readiness and to give a strong message of non-conceded, uncompromised, and befitting reply in case of any misadventure by any state.

To recapitulate, PAF needs the identical resolve to fight with her adversary as displayed in February 2019. However, strength of resolve will hinge on the integration of above-mentioned variables with optimum standards. PAF must be prepared today with a resolve for a better and respected tomorrow. Pakistan needs to remain vigilant, continuously update its operational strategy and remain prepared for any reprisal from the adversary, because the enemy will always exploit any opportunity. As Clausewitz said, “Even the ultimate outcome is not always to be regarded as final. The defeated state often considers the outcome merely as a transitory evil, for which a remedy may still be found in political conditions at a later date.”

References

- ¹ Stillion John, "Implications for Future Air Superiority," Trends in Air-to-Air Combat, April 14, 2015, 57. <https://csbaonline.org/research/publications/trends-in-air-to-air-combat-implications-for-future-air-superiority>
- ² James J. Wirtz, "How Does Nuclear Deterrence Differ from Conventional Deterrence?" *Strategic Studies Quarterly* 12, No 4 (2018): 60
- ³ Siddiqui Naveed, "PAF response to Indian aggression will be remembered as Operation Swift Retort: Air Chief." Dawn, 01 May, 2019, accessed on January 28, 2020, <https://www.dawn.com/news/1479602>
- ⁴ HT Correspondent, "India's surgical strikes across LoC: Full statement by DGMO Lt Gen Ranbir Singh." Hindustan Times, Sep 29, 2016, <https://www.hindustantimes.com/india-news/india-s-surgical-strikes-across-loc-full-statement-by-dgmo-lt-gen-ranbir-singh/story-Q5yrrpogjvxKPGazDzAnVsM.html>
- ⁵ Masood, Salman "In Kashmir, Pakistan Questions India's 'Surgical Strikes' on Militants". The New York Times, 1 October 2016, https://www.nytimes.com/2016/10/02/world/asia/kashmir-pakistan-india.html?_r=0
- ⁶ Abbas Syed Sammer, "Army rubbishes Indian 'surgical strikes' claim as two Pakistani soldiers killed at LoC", Dawn, 29 September 2016, <https://www.dawn.com/news/1286881>
- ⁷ Geoffrey Blainey, *Causes of War* (New York: The Free Press, 1973), 35–56.
- ⁸ Ibid Pp-41
- ⁹ A journalist created term, after General Colin Powell during 1990–91 Gulf War
- ¹⁰ Powell's Doctrine, in Powell's Words, Washington Post Oct 7, 2001
- ¹¹ The Newspaper's Staff Reporter, "Two Indian fighter jets downed, pilot captured" Dawn, February 28, 2019, accessed on January 28, 2020, <https://www.dawn.com/news/1466565>.
- ¹² Small air force discussed in this article have balanced capacities and capabilities, however due to geographical reason pitched against a bigger in size air force.
- ¹³ "We (Pakistan) will eat grass, even go hungry, but we will get one of our own (Atom bomb). We have no other choice!" Z A Bhutto famous quote in response to Indian Nuclear test. Khan Feroz Hassan, *Eating Grass: The Making of the Pakistani Bomb* (Stanford Security Studies, 2012), 59. ISBN: 0804776016, 9780804776011
- ¹⁴ "Fighter/Interceptor Strength by Country (2020)", *Global firepower*. <https://www.globalfirepower.com/aircraft-total-fighters.asp>.
- ¹⁵ Marcus Hellyer, Nathan Ruser, and Aakriti Bachhawat, "India's Strike on Balakot: A Very Precise Miss?". *The Strategist*. Accessed Feb 20, 2020. <https://www.aspistrategist.org.au/indias-strike-on-balakot-a-very-precise-miss/>.
- ¹⁶ Martin Howell, Gerry Doyle and Simon Scarr, "Satellite images show buildings still standing at Indian bombing site," *World News*, 6 Mar, 2019. <https://www.reuters.com/article/us-india-kashmir-pakistan-airstrike-insi/satellite-images-show-buildings-still-standing-at-indian-bombing-site-id USKCN1QNooV>
- ¹⁷ IAF spokesperson confidently said that IAF had engaged the given targets, for casualties asked the civil government, a statement contrary to whole Battle Damage Assessment concept.
- ¹⁸ Stefan Thomas Possony, *The strategy of technology; winning the decisive war*, (University Press of Cambridge, 1970).
- ¹⁹ Franz-Stefan Gady, "France Hands Over Three Rafale Fighter Jets to India", *The Diplomat*, November 22, 2019. <https://thediplomat.com/2019/11/france-hands-over-three-rafale-fighter-jets-to-india/>.
- ²⁰ John J. Mearsheimer, "Back to the Future: Instability in Europe after the Cold War," *International Security* 15, No. 1 (1990): 18.
- ²¹ Andrew Mack, "Why Big Nations Lose Small Wars," *World Politics* 27, No. 2 (Jan 1975): 176
- ²² Ibid 178
- ²³ Robert A. Pape, *Bombing to Win: Air Power and Coercion in War*, (Cornell University Press, 1996)
- ²⁴ Ivan Toft, "How the weak win wars", *International Security* 26, No. 1 (2001): 93
- ²⁵ Ibid 104
- ²⁶ US Secretary of State John Foster Dulles defined brinkmanship as "The ability to get to the verge without getting into the war is the necessary art."

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- ²⁷ Matthew Kroenig, "Nuclear Superiority and the Balance of Resolve: Explaining Nuclear Crisis Outcomes," *International Organization* 67, no.1 (2013)
- ²⁸ Robert Powell, "Nuclear Deterrence Theory, Nuclear Proliferation, and National Missile Defense", *International Security* 27, No. 4 (2003): 94-96
- ²⁹ Ibid Pp-96
- ³⁰ Andrew Mack, "Why Big Nations Lose Small Wars: The Politics of Asymmetric Conflict," *World Politics* 27 (January 1975): 175
- ³¹ Christopher Layne, Balance of Power: Theory and practice in the 21st century, *International journal (Toronto, Ont.)* 84, No.1 (January 2005) : 117 James J Wirtz and Michel Fortmann, *Balance of power: theory and practice in the 21st century*, (Stanford University Press, 2004).
- ³² Edward Luttwak, *Strategy: The Logic of War and Peace*, 1987, 16.
- ³³ US NSA John Bolton statement, "We support India's right to self-defence."
- ³⁴ France spokesperson of Foreign Affairs statement, "France recognizes India's legitimacy to ensure its security against cross border terrorism."
- ³⁵ Prime Minister's Office. Statement of Prime Minister Imran Khan on Pulwama Attack. Islamabad: 19 February, 2019, Accessed on 3 February 2020. https://pmo.gov.pk/pm_speech_details.php?speech_id=98.
- ³⁶ The balance of resolve chart is constructed by the author himself particularly for PAF, any military can make it for her individual forces after gathering relevant information.
- ³⁷ Albert Carnesale, "What is Nuclear Superiority?", *Harvard International Review* 3, No. 1 (Sep 1980).
- ³⁸ Lara Seligman, "Did India Shoot Down a Pakistani Jet? U.S. Count Says No." *Foreign Policy*, April 4, 2019, <https://foreignpolicy.com/2019/04/04/did-india-shoot-down-a-pakistani-jet-u-s-count-says-no/>
- ³⁹ Youngwoo Lee, "A measure to assess combat effectiveness using network representation." *Proceedings of the 2013 Summer Computer Simulation Conference*, Article No.: 5 (2013)
- ⁴⁰ Benjamin S Lambeth, *the role of air power going into the 21st century*, (RAND Corporation, 2000), 118
- ⁴¹ Hermann Foertsch, *The Art of Modern Warfare*, (New York: O. Piest, 1940)
- ⁴² Défense Secretary Chuck Hagel Innovation Memo – 15th Nov 2014 -OSD013411-14